IN THE CLAIMS:

1. (currently amended) A method for generating an image of a heart at a selected cardiac phase, said method comprising:

acquiring a first electrocardiogram (ECG) of the heart at a first phase;

~~introducing~~ generating a phase-delayed ECG of the heart at the first phase by using a filter to filter and introduce a time delay into the first ECG ~~to generate a phase-delayed ECG of the heart at the first phase; and~~

~~using the first ECG and the phase-delayed ECG to generate an image of the heart~~

determining if the phase-delayed ECG and the first ECG have the same approximate information; and

generating an image of the heart if the phase-delayed ECG and the first ECG have the same approximate information.

2. (currently amended) A method in accordance with Claim 1 wherein said ~~using the first ECG and the phase-delayed ECG to generate an image of the heart~~ generating an image of the heart comprises ~~using the first ECG and the phase-delayed ECG to generate~~ generating an MRI image of the heart.

3. (canceled) ~~A method in accordance with Claim 1 wherein said introducing a time delay into the first ECG comprises filtering the first ECG to introduce the time delay~~.

4. (currently amended) A method in accordance with Claim 1 wherein said determining if the phase-delayed ECG and the first ECG have the same approximate information further ~~comprising:~~ comprises receiving at a pulse sequence descriptor (PSD) the first ECG and the phase-delayed ECG[[;]], and using the PSD to determine if the first ECG and the phase-delayed ECG comprise the same approximate phase information.

5. (original) A method in accordance with Claim 4 further comprising:

rejecting the first ECG and the phase-delayed ECG based on the phase information included in the first ECG and the phase-delayed ECG; and

re-initializing an MRI system to re-acquire cardiac information of the heart.

6. (original) A method in accordance with Claim 4 further comprising:

rejecting the first ECG and the phase-delayed ECG based on the phase information included in the first ECG and the phase-delayed ECG; and

extrapolating a cardiac phase based on the phase information included in the first ECG and the phase-delayed ECG.

7. (canceled) A method in accordance with Claim 4 further comprising:

accepting the first ECG and the phase-delayed ECG; and

generating an image of the heart using the first ECG and the phase-delayed ECG.

8. (currently amended) A method for generating an image of a heart at a selected cardiac phase using an MRI imaging system, said method comprising:

acquiring a first electrocardiogram (ECG) of the heart at a first phase;

acquiring a second electrocardiogram (ECG) of the heart at the first phase by using a filter to filter and introduce a time delay into the first ECG; and

using the first ECG and the second ECG to generate an image of the heart

determining if the first ECG and the second ECG have the same approximate information; and

generating an MRI image of the heart if the first ECG and the second ECG have the same approximate information.

9. (currently amended) A method in accordance with Claim 8 wherein after said acquiring a second electrocardiogram (ECG) of the heart at the first phase and before said determining if the first ECG and the second ECG have the same approximate information, said method further ~~comprising:~~ comprises receiving at a pulse sequence descriptor (PSD) the first ECG and the second ECG~~; and~~

~~determining if the first ECG and the second ECG comprise the same approximate phase information.~~

10. (original) A method in accordance with Claim 9 further comprising:

rejecting the first ECG and the second ECG based on the phase information in the first ECG and the second ECG; and

re-initializing an MRI system to re-acquire cardiac information of the heart.

11. (canceled) ~~A method in accordance with Claim 9 further comprising:~~

~~accepting the first ECG and the phase-delayed ECG based on the phase information in the first ECG and the phase-delayed ECG; and~~

~~generating an image of the heart using the first ECG and the phase-delayed ECG.~~

12. (currently amended) A method for generating an image of a heart at a selected cardiac phase, said method comprising:

acquiring a first electrocardiogram (ECG) of the heart at a first phase;

acquiring a second electrocardiogram (ECG) of the heart at the first phase by using a filter to filter and introduce a time delay into the first ECG;

acquiring a first plethysmograph signal of the heart at a first phase; ~~and~~

~~using the first ECG and the first plethysmograph signal to generate an image of the heart~~

determining if the first ECG, the second ECG, and the plethysmograph signal have the same approximate information; and

generating an MRI image of the heart if the first ECG, the second ECG, and the plethysmograph signal have the same approximate information.

13. (currently amended) A method in accordance with Claim 12 wherein said acquiring a first electrocardiogram (ECG) of the heart at a first phase comprises acquiring a first ~~plethysmograph signal~~ ECG of the heart at a first phase using a magnetic resonance imaging (MRI) system.

14. (currently amended) A method in accordance with Claim 12 wherein after said acquiring a first plethysmograph signal of the heart at the first phase and before said determining if the first ECG, the second ECG, and the first plethysmograph signal have the same approximate information, said method further ~~comprising:~~ comprises receiving at a pulse sequence descriptor (PSD) the first ECG, the second ECG, and the first plethysmograph signal ~~; and~~

~~determining if the first ECG and the first plethysmograph signal comprise the same approximate phase information.~~

15. (currently amended) A method in accordance with Claim 14 further comprising:

rejecting the first ECG, the second ECG, and the first plethysmograph signal based on the phase information in the first ECG and the first plethysmograph signal; and

re-initializing the MRI system to re-acquire cardiac information of the heart.

16. (canceled) ~~A method in accordance with Claim 14 further comprising:~~

~~accepting the first ECG and the first plethysmograph signal based on the phase information in the first ECG and the first plethysmograph signal; and~~

~~generating an image of the heart using the first ECG and the first plethysmograph signal.~~

17. (currently amended) A magnetic resonance imaging (MRI) system comprising:

a radio frequency (RF) coil assembly for imaging a subject volume; and

a computer coupled to said RF coil, said computer configured to:

acquire a first electrocardiogram (ECG) of the heart at a first phase;

~~introduce~~ generate a phase-delayed ECG of the heart at the first phase by filtering and introducing a time delay into the first ECG ~~to generate a phase-delayed ECG of the heart at the first phase; and~~

~~use the first ECG and the phase-delayed ECG to generate an image of the heart~~

determine if the phase-delayed ECG and the first ECG have the same approximate information; and

generate an image of the heart if the phase-delayed ECG and the first ECG have the same approximate information.

18. (canceled) ~~An MRI system in accordance with Claim 17 wherein said computer is further configured to filter the first ECG to introduce the time delay.~~

19. An MRI system in accordance with Claim 17 wherein said computer is further configured to:

receive at a pulse sequence descriptor (PSD) the first ECG and the phase-delayed ECG; ~~and~~

~~determine if the first ECG and the phase-delayed ECG have the same approximate phase information.~~

20. (original) An MRI system in accordance with Claim 17 wherein said computer is further configured to:

reject the first ECG and the phase-delayed ECG based on the phase information included in the first ECG and the phase-delayed ECG; and

re-initiate the MRI system to re-acquire cardiac information of the heart.

21. (canceled) ~~An MRI system in accordance with Claim 17 wherein said computer is further configured to:~~

~~accept the first ECG and the phase-delayed ECG; and~~

~~generate an image of the heart using the first ECG and the phase-delayed ECG.~~

22. (currently amended) A computer program embodied on a computer readable medium for controlling a medical imaging system, said program configured to:

acquire a first electrocardiogram (ECG) of the heart at a first phase;

acquire a second electrocardiogram (ECG) of the heart at the first phase <u>by using a filter to filter and introduce a time delay into the first ECG</u>; ~~and~~

~~use the first ECG and the second ECG to generate an image of the heart~~

<u>determine if the first ECG and the second ECG have the same approximate information; and</u>

generate an MRI image of the heart if the first ECG and the second ECG have the same approximate information.

23. (currently amended) A computer program in accordance with Claim 22 wherein said program further configured to:

receive at a pulse sequence descriptor (PSD) the first ECG and the second ECG; and

~~determine if the first ECG and the second ECG comprise the same approximate phase information.~~

24. (original) A computer program in accordance with Claim 22 wherein said program further configured to:

reject the first ECG and the second ECG based on the phase information in the first ECG and the second ECG; and

re-initiate the MRI system to re-acquire cardiac information of the heart.

25. (canceled) ~~A computer program in accordance with Claim 22 wherein said program further configured to:~~

~~accept the first ECG and the phase-delayed ECG based on the phase information in the first ECG and the phase-delayed ECG; and~~

~~generate an image of the heart using the first ECG and the phase-delayed ECG.~~